

Santa Barbara County 7/22/15 email comments on Phase 3 Maintenance/Monitoring plan and responses:

**Comment 1: “Significant Storm Event:** Thanks for revising the definition (we were also unclear on the previous definition). However, we would request that the definition be revised to: **“Measured from the east channel buoy, a minimum 10 foot wave height (3 meters) with a wave interval of 16 seconds or less.”**

**Response 1:** The NOAA Scientific Support Coordinator (SSC) was contacted to provide a recommendation for defining “significant storm event.” In an effort to resolve any discrepancies between the initially drafted definition and the above comment, the UC reconfirmed the parameters with the NOAA SSC and will not change the final/ revised definition other than providing an additional third link that provides regional maps of peak period and direction nowcast and up to 90-hour forecasts. The east channel buoy (#46053) is 20 miles offshore and can provide numeric information on wave height, period and direction but it is in the middle of the channel and conditions may exist along the shoreline that may be different from what is observed off of the coast; so UC preference is to use the data from the websites for monitoring, in addition to using data from east channel buoy (#46053). Additionally after consulting with the SSC the UC has decided to keep the wave period of greater than 16 seconds not less than 16 seconds because wave period greater than 16 seconds would have a greater potential for beach erosion. The EUL and SCAT coordinator retain the ability to revisit any beach they feel may have been impacted by increased wave action regardless of whether or not the conditions of “significant storm event” have been met.

**Comment 2: Sampling/Fingerprinting:** As with the OOSA, we would like the entire affected area (as defined in OOSA) to be re-tested after this significant storm event. We do not agree to only have certain divisions re-sampled. In order to be thorough and consistent, the entire area should be retested. Guidelines for process, protocol, number and location of samples should be consistent with the OOSA plan.

**Response 2:** Jennifer Gold (the UC’s previous EUL) provided SB County information from SCAT trenches regarding subsurface oiling. A standard procedure as part of conducting SCAT surveys includes digging trenches to determine if oiling exists beneath the top layers of sand. SCAT teams have been surveying segments for buried oil throughout the response by digging trenches. Out of segments surveyed by SCAT teams, subsurface oil has been observed in trenches in Operational Divisions I, J, and K but primarily at Refugio Beach (Division J). The subsurface oil in Division I consisted of oiled cobbles/boulders which are being cleaned. At east end of Division J and west end of Division K there were oil mats that were dug up and oiled cobble being cleaned. Also, unrecoverable sheen was observed in interstitial water in many pits dug at Refugio and the UC’s Environmental Unit previously provided a figure where subsurface oiling has been observed. The UC also previously provided a hard copy of the June 24 report titled “Sunken Oil Assessment Survey Results: Refugio Incident” summarizes a study led by NOAA which consisted of the following components:

- Detailed multibeam sonar surveys to map the bathymetry and identify possible locations of sunken/ subsurface oil accumulation
- Side scan sonar surveys to identify benthic habitats and features to identify possible locations of sunken oil accumulation
- Video and GoPro camera photographs deployed on a remotely operated vehicle (ROV) to visually identify sunken oil
- Diver inspections of priority sites to look for and recover sunken oil or oiled wrack

This Sunken Oil Assessment Survey report concluded that essentially no sunken or suspended oil had been observed offshore in the area of highest potential, from Refugio Cove to El Capitan (with the heaviest amount of oil stranded on the shoreline and reworked by waves). It appears that the initial observations of sunken oil at four locations in and east of Refugio Cove, which consisted of isolated tarballs and oiled wrack, represented minor amounts of sunken oil that have since been reworked by wave action. The conclusion was there is little to no risk of re-oiling of shoreline habitats from sunken oil in nearshore habitats.

Based on the aforementioned information and because the July 5, 2015 Overview Oiling Survey Assessment (OOSA) sample results did not indicate Refugio Oil still present on beaches except Las Varas Beach (SB-Div-L) the UC does not believe the entire affected area needs to be re-tested after the significant storm event on beaches that have been previously signed off as not requiring monitoring. The Phase III plan will not be amended to include re-surveying/sampling all beaches. If a report comes into OES/NRC regarding oil on a beach, the agencies responsible to respond (OSPR and USCG) will do so as they normally required.

**Comment 3: Phase 3 End point:** After the above two items are met, and there is no oil linked to the 901 pipeline or it has been cleaned, then Phase 3 has been met (assuming by this stage all areas have met Phase 2 endpoints). This could be in 2016, 2017 or 2018 ... Phase 3 should not have a stated end date, because we don't know when there will be said storm. The end date needs to be linked to the sampling after the significant storm event, as well as another at the end of that winter storm season."

**Response 3:** Phase III plan does not need to be amended to address this comment because the Phase III plan on page 4 already states, "After the March 2016 sampling, the need to continue Phase III will be re-evaluated based on sampling results and SCAT observations. If at this time, fingerprinting results do not result in any matches to Line 901 oil and SCAT does not recommend any additional remediation or monitoring, then a Phase III final sign off memo will be presented to the UC by the EUL/PSC. If the UC determines that Phase III must continue, a new sampling and SCAT survey schedule will be generated by the Planning Section Chief and presented to the UC for approval."